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February 1996

Volume 2

FINAL ENVIRONMENTAL IMPACT STATEMENT

on a

Proposed Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel

Appendix G
Background Documents

United States Department of Energy
Assistant Secretary for Environmental Management
Washington, DC 20585

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release September 27, 1993

FACT SHEET
NONPROLIFERATION AND EXPORT CONTROL POLICY

The President today established a framework for U.S. efforts to prevent the proliferation of weapons of mass destruction and the missiles that deliver them. He outlined three major principles to guide our nonproliferation and export control policy:

-- Our national security requires us to accord higher priority to nonproliferation, and to make it an integral element of our relations with other countries.

-- To strengthen U.S. economic growth, democratization abroad and international stability, we actively seek expanded trade and technology exchange with nations, including former adversaries, that abide by global nonproliferation norms.

-- We need to build a new consensus — embracing the Executive and Legislative branches, industry and public, and friends abroad — to promote effective nonproliferation efforts and integrate our nonproliferation and economic goals.

The President reaffirmed U.S. support for a strong, effective nonproliferation regime that enjoys broad multilateral support and employs all of the means at our disposal to advance our objectives.

Key elements of the policy follow.

Fissile Material

The U.S. will undertake a comprehensive approach to the growing accumulation of fissile material from dismantled nuclear weapons and within civil nuclear programs. Under this approach, the U.S. will:

-- Seek to eliminate where possible the accumulation of stockpiles of highly-enriched uranium or plutonium, and to ensure that where these materials already exist they are subject to the highest standards of safety, security, and international accountability.

-- Propose a multilateral convention prohibiting the production of highly-enriched uranium or plutonium for nuclear explosives purposes or outside of international safeguards.

-- Encourage more restrictive regional arrangements to constrain fissile material production in regions of instability and high proliferation risk.

-- Submit U.S. fissile material no longer needed for our deterrent to inspection by the International Atomic Energy Agency.

-- Pursue the purchase of highly-enriched uranium from the former Soviet Union and other countries and its conversion to peaceful use as reactor fuel.

-- Explore means to limit the stockpiling of plutonium from civil nuclear programs, and seek to minimize the civil use of highly-enriched uranium.

-- Initiate a comprehensive review of long-term options for plutonium disposition, taking into account technical, nonproliferation, environmental, budgetary and economic considerations. Russia and other nations with relevant interests and experience will be invited to participate in this study.

The United States does not encourage the civil use of plutonium and, accordingly, does not itself engage in plutonium reprocessing for either nuclear power or nuclear explosive purposes. The United States, however, will maintain its existing commitments regarding the use of plutonium in civil nuclear programs in Western Europe and Japan.

Export Controls

To be truly effective, export controls should be applied uniformly by all suppliers. The United States will harmonize domestic and multilateral controls to the greatest extent possible. At the same time, the need to lead the international community or overriding national security or foreign policy interests may justify unilateral export controls in specific cases. We will review our unilateral dual-use export controls and policies, and eliminate them unless such controls are essential to national security and foreign policy interests.

We will streamline the implementation of U.S. nonproliferation export controls. Our system must be more responsive and efficient, and not inhibit legitimate exports that play a key role in American economic strength while preventing exports that would make a material contribution to the proliferation of weapons of mass destruction and the missiles that deliver them.

Nuclear Proliferation

The U.S. will make every effort to secure the indefinite extension of the Non-Proliferation Treaty in 1995. We will seek to ensure that the International Atomic Energy Agency has the resources needed to implement its vital safeguards responsibilities, and will work to strengthen the IAEA's ability to detect clandestine nuclear activities.

Missile Proliferation

We will maintain our strong support for the Missile Technology Control Regime. We will promote the principles of the MTCR Guidelines as a global missile nonproliferation norm and seek to use the MTCR as a mechanism for taking joint action to combat missile proliferation. We will support prudent expansion of the MTCR's membership to include additional countries that subscribe to international nonproliferation standards, enforce effective export controls and abandon offensive ballistic missile programs. The United States will also promote regional efforts to reduce the demand for missile capabilities.

The United States will continue to oppose missile programs of proliferation concern, and will exercise particular restraint in missile-related cooperation. We will continue to retain a strong presumption of denial against exports to any country of complete space-launch vehicles or major components.

The United States will maintain its general policy of not supporting the development or acquisition of space-launch vehicles in countries outside the MTCR.

For MTCR member countries, we will not encourage new space-launch vehicle programs, which raise questions on both nonproliferation and economic viability grounds. The United States will, however, consider exports of MTCR-controlled items to MTCR member countries for peaceful space launch programs on a case-by-case basis. We will review whether additional constraints or safeguards could reduce the risk of misuse of space launch technology. We will seek adoption by all MTCR partners of policies as vigilant as our own.

Chemical and Biological Weapons

To help deter violations of the Biological Weapons Convention, we will promote new measures to provide increased transparency of activities and facilities that could have biological weapons applications. We call on all nations — including our own — to ratify the Chemical Weapons Convention quickly so that it may enter into force by January 13, 1995. We will work with others to support the international Organization for the Prohibition of Chemical Weapons created by the Convention.

Regional Nonproliferation Initiatives

Nonproliferation will receive greater priority in our diplomacy, and will be taken into account in our relations with countries around the world. We will make special efforts to address the proliferation threat in regions of tension such as the Korean peninsula, the Middle East and South Asia, including efforts to address the underlying motivations for weapons acquisition and to promote regional confidence-building steps.

In Korea, our goal remains a non-nuclear peninsula. We will make every effort to secure North Korea's full compliance with its nonproliferation commitments and effective implementation of the North-South denuclearization agreement.

In parallel with our efforts to obtain a secure, just, and lasting peace in the Middle East, we will promote dialogue and confidence-building steps to create the basis for a Middle East free of weapons of mass destruction. In the Persian Gulf, we will work with other suppliers to contain Iran's nuclear, missile, and CBW ambitions, while preventing reconstruction of Iraq's activities in these areas. In South Asia, we will encourage India and Pakistan to proceed with multilateral discussions of nonproliferation and security issues, with the goal of capping and eventually rolling back their nuclear and missile capabilities.

In developing our overall approach to Latin America and South Africa, we will take account of the significant nonproliferation progress made in these regions in recent years. We will intensify efforts to ensure that the former Soviet Union, Eastern Europe, and China do not contribute to the spread of weapons of mass destruction and missiles.

Military Planning and Doctrine

We will give proliferation a higher profile in our intelligence collection and analysis and defense planning, and ensure that our own force structure and military planning address the potential threat from weapons of mass destruction and missiles around the world.

Conventional Arms Transfers

We will actively seek greater transparency in the area of conventional arms transfers and promote regional confidence-building measures to encourage restraint on such transfers to regions of instability. The U.S. will undertake a comprehensive review of conventional arms transfer policy, taking into account national security, arms control, trade budgetary and economic competitiveness considerations.

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United States Government | Department of Energy

memorandum

DATE: DEC 28 1994

REPLY TO
ATTN OF: EM-37

SUBJECT: Analysis of a Potential New Processing Facility in the Foreign Research Reactor Spent Nuclear Fuel Environmental Impact Statement

TO: Jill E. Lytle
Deputy Assistant Secretary for Waste Management, EM-30

Based on a series of meetings held between staff from EM-4 and EM-30 during early December, I request that you take immediate action to include in the Foreign Research Reactor (FRR) Spent Nuclear Fuel (SNF) Environmental Impact Statement (EIS) an alternative to initiate development work leading to a decision on whether to construct and operate a new SNF processing facility. The following parameters apply to this additional alternative:

- Any new facility would be capable of changing the FRR SNF into a form suitable for geologic disposal, without necessarily separating the fissile materials. A number of alternative processes would ultimately be considered for use in such a facility. Examples of these potential processes should be briefly discussed in the EIS.
- Due to the need for further research and development before the design of such a facility could be selected, the discussion of a new facility will be highly conceptual and programmatic in nature. Further NEPA analysis would be required prior to any decision to construct such a facility.
- Any new facility would be designed to operate safely and to minimize waste volumes, toxicity, and mobility.
- Any new facility would meet or exceed current environmental requirements.
- The alternative should consider construction of a potential new facility at all five of the sites considered for other FRR SNF management activities.
- The discussion should describe the range of quantities of spent fuel that such a facility might be designed to handle (hypothetically, from as little as just the foreign research reactor spent fuel that might be accepted under the FRR SNF EIS to a maximum of all of DOE's spent fuel).
- The design and operation of a new facility would be consistent with U.S. nuclear weapons nonproliferation policies, including the requirements of Presidential Decision Directive 13 regarding reprocessing.

- This alternative considering development potentially leading to a new SNF processing facility is to be in addition to the analysis of chemical separation of the FRR SNF that is already included in the FRR SNF EIS.
- In addition, consideration should be given to utilizing the National Academy of Science to assess the feasibility of using a new facility to produce a waste form that will meet the waste acceptance criteria for a geologic repository.

I recognize that incorporation of this alternative into the FRR SNF EIS at this stage in the development of the EIS will result in approximately a two week delay in the completion of the draft of the EIS. The draft was originally scheduled to be issued for public review and comment by the end of December 1994 and has recently been delayed about two weeks to resolve internal DOE comments. This change will result in a further delay and release of the draft FRR SNF EIS for public review and comment by no earlier than February 1995. This will probably result in a delay in the completion of the final FRR SNF EIS from June 1995 until July 1995. I understand that any delay in the completion of the FRR SNF EIS is likely to raise some objections among the FRR operators. Nevertheless, I consider that it is essential to evaluate this proposed new processing facility and that the small additional delay is acceptable.

Thomas P. Grumbly
Assistant Secretary for
Environmental Management

DEPARTMENT OF STATE
WASHINGTON

October 26, 1992

Dear Mr. Secretary:

During the 1992 International Meeting on Reduced Enrichment for Research and Test Reactors (RERTR) in Denmark, participants voiced very strong concern regarding the apparent reluctance of the Department of Energy to renew the Off Site Fuels Policy, to take back spent research reactor fuel from abroad.

Since 1978, the United States has encouraged countries to convert from the use of high enriched fuel (HEU) to low enriched fuel (LEU). This effort constitutes a key element of U.S. nuclear non-proliferation policy, which has been accepted with some reluctance by other countries, since it entails additional effort and expense on their part. Historically, the Off Site Fuels Policy has been an integral part of the conversion effort, which is perceived by countries as essential to meet reactor operating licensing requirements for disposition of spent fuel and to assure that their research reactor spent fuel is disposed of in a safe and reliable manner.

I fully recognize that renewal of this program will require DOE to resolve difficult and complex budgetary, environmental and technical issues. However, for a variety of reasons, I believe it is essential for DOE to move promptly to renew its policy of taking back foreign research reactor fuel.

We have worked hard for many years to reestablish the position of the United States as a reliable partner in nuclear commerce. We should not forfeit this effort by appearing uncertain about a policy which we have long supported and which is so critical to our non-proliferation objective of eliminating HEU from commercial use.

Clearly, we also do not want to forfeit the significant nuclear non-proliferation gains which have resulted from the RERTR program and our agreement to take back foreign research reactor spent fuel. Limiting the use and location of HEU abroad serves the security interests of both the United States

The Honorable
James D. Watkins,
Secretary of Energy.

and the international community as a whole. Hence, it is particularly disturbing to hear that some countries are considering halting their conversion programs, and even reverting to the use of HEU fuels in the event the United States does not agree to take back U.S.-supplied LEU spent fuel.

Over the past four years, we have maintained a dialogue with DOE concerning the importance of the spent fuel policy. Given the urgent need to resolve this matter, I strongly urge that DOE move quickly to reassure other governments that their spent fuel needs will be fully addressed and that we will continue to honor our commitments to them.

Sincerely,

Lawrence S. Eagleburger
Acting Secretary

UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY
Washington, D.C. 20451

THE DIRECTOR

07 DEC 1992

MEMORANDUM FOR THE SECRETARY OF ENERGY

SUBJECT: Reducing Foreign Inventories of U.S.-Supplied Highly Enriched Uranium

For many years the United States has encouraged reduced use of highly enriched uranium (HEU) for civil purposes as a key component of U.S. nuclear nonproliferation policy. This effort has met with some success, and the civil use of HEU has diminished, bringing reduced stockpiles and reduced transportation and diversion risks. An important incentive for foreign users of U.S.-supplied HEU to convert their reactors to low enriched uranium (LEU) fuel was the United States' program to take back the spent fuel.

Recent historic political developments have also presented opportunities for further reducing stockpiles of HEU abroad, thereby further promoting our nuclear nonproliferation objectives. We are arranging to purchase 500 metric tons of HEU from Russia for peaceful uses. South Africa has ended its HEU production and has offered to sell its stockpile to the United States.

I believe we should consolidate these gains and encourage further reduction of civil HEU use. It is essential to act soon to avoid damaging the longstanding and successful U.S. program that encouraged foreign operators to convert HEU research reactors fueled by the United States to the use of LEU fuel. Without appropriate action, some foreign operators might decide against conversion and others may switch back to HEU fuel. Moreover, new foreign suppliers of HEU may emerge.

In this regard, I have three recommendations:

1. Conclude contractual arrangements with appropriate foreign organizations to take back U.S.-supplied research reactor fuel following any necessary environmental determination.

2. Examine the feasibility of additional incentives that would be helpful or necessary toward ensuring the conversion

of those reactors for which alternative LEU fuels have been identified. A general review of the conversion program may be appropriate in any event in view of the recent amendment to the Atomic Energy Act which severely restricts future HEU licensing. In regard to that legislation, we would also support efforts to reestablish the LEU target development program for production of medical isotopes.

3. Ensure that the United States will make South Africa an attractive offer for its HEU.

I do not underestimate the difficulties posed by these recommendations. However, actions such as these would maintain and strengthen a longstanding and successful U.S. policy of reducing HEU stockpiles abroad -- a policy which will continue to promote global nuclear nonproliferation objectives.

Ronald F. Lehman II

THE DIRECTOR GENERAL

1993-07-01

Dear Madam Secretary,

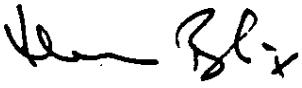
Since 1978, the United States has encouraged countries to convert the cores of their research and test reactors from the use of highly enriched uranium (HEU) to nuclear fuels of low enriched uranium (LEU). This effort, initiated by President Carter, was an important element of the U. S. non-proliferation policy throughout most of the 1980s and was fully supported through the Reduced Enrichment for Research and Test Reactors (RERTR) programme by the International Atomic Energy Agency. The expiration of the U. S. Department of Energy's Off-Site Fuels Policy (the Policy) in 1988 has led to a crisis for the operators of research reactors in many countries where the laws are such that continuation of licensing and/or purchase of new nuclear fuels is contingent upon a resolution of spent fuel management problems. This situation is exacerbated for many reactor operators who complied with the wishes of the U. S. and converted their cores to LEU. They now have interim storage pools filled with irradiated HEU fuels and are trying to cope with a greater throughput of LEU fuels. The anticipated announcement that the U.S. DOE will renew the Policy and in due course begin the take back of research reactor fuels of U.S. origin from around the world will be very much welcomed by the Agency and many of its Member States.

However, because of the problems of spent fuel management facing the operators of many research reactors the Agency urges the earliest implementation of the Policy renewal. Some of these research facilities are the only sources of radioisotope production for medical uses in the countries in question, but face imminent closure unless they can resolve their problems of spent fuel management quickly. The Agency has initiated programmes to advise them, but the real solution for most of them is to return their irradiated research reactor fuels of U. S. origin. It is understood that the renewal of the Policy will require the solution of difficult and complex budgetary, environmental, transportation, legal and technical issues. Nevertheless, the Agency is confident that when the resources of the U. S. DOE are brought to bear on these problems that they will be resolved as soon as possible.

The Honourable Hazel O'Leary
Secretary of Energy
Washington, DC 20585
United States of America

Limiting the use and location of HEU fuels throughout the world remains a valuable objective and will serve the security interests of all nations. The Agency stands ready to help in any way it can consistent with its mandate and budgetary constraints.

Yours sincerely,



Hans Blix

THE SECRETARY OF STATE

WASHINGTON

July 2, 1993

Dear Madam Secretary:

I am writing to urge your personal support for renewal by the Department of Energy of the Off Site Fuels Policy for the acceptance of spent research reactor fuel from abroad.

The Department of State has strongly supported this policy because of its importance in gaining foreign cooperation in converting reactors from highly enriched uranium (HEU) to low enriched (LEU) fuel under the aegis of the Reduced Enrichment in Research and Test Reactors (RERTR) Program.

We recall Secretary Watkins confirmed in 1992 that the Department of Energy proposed to renew the Off Site Fuels Policy, but with the caveat that meeting the requirements of the National Environmental Policy Act (NEPA) could take as long as 2 to 3 years. We are concerned, however, about reports of substantial delays in the amendment of the existing Environmental Assessment, an essential early step in the NEPA process.

Foreign research reactor operators are reportedly highly concerned about a perceived change in DOE policy and have threatened to withdraw from further RERTR cooperation and to seek resumption of HEU supply from sources such as Russia.

A breakdown of the international consensus on conversion of research and test reactors to LEU and a return to an HEU fuel economy would undermine 15 years of intensive U.S. non-proliferation efforts on this matter and substantially reduce the ability of the U.S. to influence nuclear policy in bilateral and international fora.

In light of current developments, I urge your support for early reaffirmation by DOE to other governments of our continued commitment as a reliable supplier to fully address their spent fuel needs.

Sincerely,

Warren Christopher

Warren Christopher

The Honorable
Hazel R. O'Leary,
Secretary of Energy.

The Secretary of Energy
Washington, DC 20585

July 13, 1993

The Honorable Warren Christopher
Secretary of State
Washington, D.C. 20520

Dear Mr. Secretary:

This is in response to your letter dated July 2, 1993, urging my support for renewal of the Department of Energy's policy for the acceptance of spent research reactor fuel from abroad.

The Department of Energy remains committed to the Reduced Enrichment for Research and Test Reactors (RERTR) program, and to the proposal to establish a policy for the return of U.S. origin spent fuel from foreign research reactors. In response to your letter, and other inquiries we have received on this subject, we have taken a hard look at how we can expedite actions in these areas. We have decided on a three-tiered approach, as follows:

1. For any foreign research reactor spent fuel returns for which we can mutually agree that a bona fide emergency exists, the Department of Energy will join with you in consulting with the Council on Environmental Quality on the implementation of alternative arrangements for compliance with environmental review requirements pursuant to the emergency provisions of the Council on Environmental Quality's regulations implementing the National Environmental Policy Act (40 CFR 1506.11).

2. In order to be able to respond to any near-term situation in which the expiration of the Department's acceptance of foreign research reactor spent fuel may threaten the Reduced Enrichment for Research and Test Reactors Program, the Department has begun an expeditious Environmental Assessment of the proposed return of sufficient spent fuel to eliminate that threat. It is proposed that any near-term spent fuel returns would be conducted under the terms and conditions of the enclosed proposed policy and be limited to approximately 550 spent fuel elements which can be stored in existing DOE capacity. This Environmental Assessment is scheduled to be completed by September 1993, and, if appropriate, a proposed Finding of No Significant Impact will be issued for public review by no later than September 30, 1993. Our goal is to complete the National Environmental Policy Act review process of this proposed limited foreign research reactor spent fuel acceptance by the end of this calendar year.

3. For the longer term, the Department will undertake preparation of an Environmental Impact Statement that addresses the proposed return of all U.S. origin foreign research reactor spent fuel, as specified in the enclosed proposed policy. A notice of intent for preparation of this Environmental Impact Statement is in preparation and should be issued in August 1993. The Department intends to issue the draft of the Environmental Impact Statement for public review by no later than the

end of December 1994, and the final Environmental Impact Statement by the end of June 1995.

We cannot continue to address this issue in a business as usual manner. The actions outlined above reflect our determination to move forward promptly and our acknowledgement of the need for a new definition of national security - one that includes both nonproliferation and environmental concerns. To provide added emphasis to the urgency of this effort, the Department requests that the Department of State participate as a cooperating agency in preparation of this environmental documentation.

In conclusion, the Department is committed to work with you and representatives of the Council on Environmental Quality at any time that you consider an emergency situation may be developing. In the meantime, we are proceeding as expeditiously as possible on the actions outlined above.

Sincerely,

Hazel R. O'Leary

Enclosure

DRAFT

Proposed Foreign Research Reactor Spent Nuclear Fuels Acceptance Policy

13 July 1993

PURPOSE - This proposed Department of Energy policy would support United States nonproliferation policy, including one of its key elements, the Reduced Enrichment Research and Test Reactors Program. It would provide opportunities and incentives for research reactor operators in foreign countries holding United States origin spent nuclear fuel containing highly enriched uranium to return that spent nuclear fuel to the United States for storage and eventual geologic disposal. This proposed policy is intended to support the United States nonproliferation objective of eliminating United States origin highly enriched uranium from research reactor use. It is also consistent with Section 903(a) of the Energy Policy Act of 1992, which places further restrictions on the export of highly enriched uranium from the United States. This proposed policy would provide incentives to encourage and assist developing countries (defined below) in returning their United States origin highly enriched uranium research reactor spent nuclear fuel to the United States for storage and disposal. For developed countries, the policy would allow return of United States origin research reactor spent nuclear fuel to the United States for storage and disposal on a full-cost-recovery basis.

PROPOSED POLICY - The United States proposes to adopt a policy under which:

1. For developing countries (i.e., those eligible for assistance under the United Nations Assistance Program), the United States would offer to accept United States origin research reactor spent nuclear fuel containing highly enriched uranium for storage and disposal in the United States. The United States would reimburse the developing country for costs incurred in transportation of the spent nuclear fuel from the developing country to a receipt facility in the United States. Upon acceptance of the spent nuclear fuel in the United States, the United States would assume all responsibility for the spent nuclear fuel, including storage of the spent nuclear fuel in the United States, any preparation of the spent nuclear fuel for disposal, all transportation in the United States subsequent to spent nuclear fuel acceptance, and ultimate geologic disposal of the spent nuclear fuel in the United States.

2. For developed countries, the United States would offer to accept all United States origin research reactor spent nuclear fuel containing highly enriched uranium for storage, preparation for disposal, and eventual geologic disposal in the United States. Such acceptance would be conducted on a full-cost-recovery basis, with the developed country responsible for transportation of the spent nuclear fuel to a designated receipt facility in the United States and paying the United States the full cost of all storage, all transportation within the United States subsequent to spent nuclear fuel acceptance, disposal preparation, and ultimate geologic disposal.

3. To encourage the conversion of foreign research reactors currently using United States origin highly enriched uranium fuels to low enriched uranium fuels, the United States would offer to accept for storage and ultimate disposal certain United States origin low enriched uranium research reactor spent nuclear fuel. Specifically, low enriched uranium research reactor spent nuclear fuel of United States origin would be accepted for a ten year period following implementation of this policy from reactors that have already converted, or that were constructed to use and operate with low enriched uranium fuels. United States origin low enriched uranium research reactor spent nuclear fuel exported to research reactors that convert within five years of the effective date of this policy would also be accepted for a ten-year period following their initial order for low enriched uranium fuel.

   The acceptance of low enriched uranium research reactor spent nuclear fuel from developed and developing countries would be conducted on the same terms as stated in 1 and 2 above for highly enriched uranium research reactor spent nuclear fuel.

CONDITIONS

1. This proposed policy would apply only to receipt of spent research reactor nuclear fuel of United States origin.

2. Ownership of the spent nuclear fuel would be transferred to the United States upon acceptance of the spent nuclear fuel by the United States at a designated receipt and inspection facility in the United States.

3. All transportation within a developing country and to the United States receipt facility would be the responsibility of the developing country, but would be paid for by the United States (subject to United States approval of the transportation arrangements and costs).

   All transportation within a developed country and to the United States receipt facility would be the responsibility of, and would be paid for by, the developed country.

4. Criteria concerning the required condition of the spent nuclear fuel would be published by the United States as part of the announcement of this policy, to clarify conditions for acceptance of the spent nuclear fuel. In general terms, all spent nuclear fuel to be accepted by the United States would be required to be either intact and free of defects or canned to ensure the ability to safely contain and manage the spent nuclear fuel.

5. For developed countries, the fee to be paid to achieve full cost recovery would be established by the Department prior to entering into the agreements to accept the spent nuclear fuel. This fee would be based on estimates of the cost of the storage and disposal activities that would be required. The fee

schedule would be updated annually to account for items such as inflation, and experience with the program.

TERMINATION - This policy of accepting low enriched uranium research reactor spent nuclear fuel would expire ten years after the effective date of this policy (or ten years following placement of an order for low enriched uranium research reactor fuel to replace highly enriched uranium research reactor fuel, if such an order is placed within five years of the effective date of this policy). Therefore, countries and research reactor operators that plan to take advantage of this policy for spent nuclear fuel containing low enriched uranium should begin planning for their own national or regional means of storage and disposal of low enriched uranium research reactor spent nuclear fuel for use following termination of this policy.

The proposed policy for accepting research reactor spent nuclear fuel containing highly enriched uranium of United States origin would encourage all countries to return this United States origin research reactor spent nuclear fuel as soon as possible.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUL 0 3 1991

Mr. John J. Easton, Jr.
Assistant Secretary of Energy
International Affairs and Energy Emergencies
U.S. Department of Energy
Washington, DC 20585

Dear Mr. Easton:

I am responding to your letter of May 31, 1991, requesting the comments of the Nuclear Regulatory Commission on issues related to the Department of Energy's consideration of renewing the Off-Site Fuels Policy.

The NRC staff believes that it is in the best interest of the United States to allow spent U.S.-origin high enriched uranium (HEU) fuel from domestic and foreign research reactors to be returned to DOE for processing and storage. Such a take-back policy reduces certain safeguards, physical security and safety concerns associated with the indefinite, long-term storage of irradiated HEU fuel in diverse locations. It would, of course, also alleviate the serious lack of spent fuel storage capacity being experienced by several research facilities, including ones in Japan and several European countries. In this regard, however, we assume that in implementing a resumption of the DOE policy to accept spent HEU fuel, the U.S. would not diminish its pressure on foreign countries to continue their best efforts to convert remaining HEU-fueled research reactors to low enriched uranium (LEU) fuel.

In the same vein, it would appear useful for DOE also to extend, beyond the expiration date of December 31, 1992, its offer to take back spent U.S.-origin LEU research reactor fuel from domestic and foreign users. DOE's current examination of the Off-Site Fuels Policy will no doubt address the question of whether or not this commitment is essential to U.S. efforts to minimize the use of HEU fuel in research reactors abroad. Your analysis of this and other aspects of the policy will be of great interest to NRC and can be expected to influence our future export licensing activities.

I trust that these general comments are useful.

Sincerely,

James M. Taylor
Executive Director for Operations

THE SECRETARY OF STATE

WASHINGTON

December 12, 1995

Dear Madam Secretary:

As we move to the final stages of preparing the Environmental Impact Statement on a Proposed Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel (the EIS), I want to reaffirm the critical need for implementing this policy. The spent fuel acceptance policy which the EIS supports is central to our goal of preventing the spread of nuclear weapons -- and therefore to a major national security objective of this Administration.

One of the key elements of the President's nonproliferation policy has been to minimize and eventually to eliminate the use of high enriched uranium (HEU) in civil world commerce. I greatly appreciate the efforts that you personally have made to reinvigorate the Reduced Enrichment for Research and Test Reactors (RERTR) program which is designed to convert research reactors around the world from using HEU to LEU fuel.

As you know, the willingness of research reactor operators to support this vital program depends on our willingness to assist them with disposition of the spent fuel produced from nuclear materials which the United States originally supplied. Failure to implement this policy successfully would deal a crippling blow to our efforts to minimize the commercial use of HEU.

I hope that you will proceed soon to publish the final EIS and to begin implementing the policy using available practical and appropriate means to ensure the expeditious implementation of the program.

You and your staff are to be commended for the outstanding effort made in preparing the EIS. The Department of State stands ready to cooperate with you in whatever way we can.

Sincerely,

Warren Christopher

The Honorable
Hazel R. O'Leary,
Secretary of Energy